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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/406,170	09/23/1999	VARADARAJAN SRINIVASAN	02489.P015	1319

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EXAMINER

BLOUNT, STEVEN

ART UNIT PAPER NUMBER

2661

DATE MAILED: 04/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/406,170

Applicant(s)

SRINIVASAN ET AL.

Examiner

Steven Blount

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 65 - 75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 65 - 72 is/are allowed.
- 6) ☒ Claim(s) 73 - 75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2, 4 - 7, 9, 14.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 73 – 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art (hereinafter AAPA) in view of U.S. patent 5,317,756 to Komatsu et al.

With regard to claim 73, AAPA teaches the use of a CAM 304 with a priority index matched to a policy field on page 4 of the specification, and also discusses, on page 5, the problem that:

“When a policy is changed by adding a new policy statement that has a higher (*or equal*) priority than at least one of the policy statements already stored in CAM array 304, the table management hardware and software needs to reprioritize or reorder all or part of CAM array 304. This is typically accomplished by reloading the CAM array with a new prioritized group of policy statements. This can add significant overhead to the router (e.g., delay and additional hardware and software) to change even just one policy statement in a given policy” (emphasis added).

AAPA does not, however, teach the solution to this problem to be found in comparing the priority number (associated with the policy statement of which has been newly added to the CAM array) with the priority of numbers (each with its own associated policy statements) already in the CAM array, determining that the priority

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number is equal to one of the plurality of priority numbers, and locating the position of the policy statement in the memory and subsequently deleting it.

Komatsu et al teaches using data priority (col 5 lines 41+) and comparing the Data until a match is made, whereinafter "the queuing region in the matching memory is emptied" (col 5 lines 55+).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have compared the priority number newly added to the CAM array of AAPA with those already in existence and looked for equality in the numbers and, when this is found, have subsequently deleted the policy statement from the CAM array already in existence, in light of the teachings of Komatsu et al, in order to provide a means for avoiding duplicate values in the CAM array without having to reprioritize the data.

With regard to claims 74 and 75, see the discussion of writing the higher priority data into the matching memory 82 in col 5 lines 59+ and note that this would render the application of this process to lower priority data (numbers) obvious as well.

3. Claims 65 – 75 are provisionally allowed. The examiner notes that the closest, prior art, AAPA/Komatsu et al as discussed above, does not teach or suggest writing a new policy statement to an available (ie, *empty*) location in memory, with respect to independent claims 65 and 68.

4. Examiner Steven Blount may be reached at 703-305-0319 Monday through Friday between the hours of 9:00 and 5:30.

SB


3/25/04


Anil Patel
Primary Examiner